

# DEPARTMENT OF TRANSPORTATION AND ENVIRONMENTAL SERVICES

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P. O. Box 178 – City Hall Alexandria, Virginia 22313 March 2, 2005

Mr. Kenneth L. McBee
Air Quality Modeler
Virginia Department of Environmental Quality
629 East Main Street
PO Box 10009
Richmond, Virginia 23240-0009

Dear Mr. McBee,

Thank you for sharing with the City of Alexandria, your response to ENSR's Protocol for Modeling the Effects of Downwash from Mirant's Potomac River Power Plant and incorporating many of the City's concerns in your response. The City would like to request that additional clarifications be provided to Mirant/ENSR on a few remaining issues that are outlined below.

#### PM10 as Surrogate for PM2.5

Your response states that the PM2.5 emissions will not be considered due to the current lack of a US EPA-approved procedure for demonstration of compliance with PM2.5 National Ambient Air Quality Standards (NAAQS). Lack of an approved procedure does not remove PM2.5 from the list of criteria air pollutants regulated by the ambient air quality standards incorporated at 9 VAC Chapter 30. While your letter appears to concur with the necessity of demonstrating compliance with PM2.5 standards by requiring ENSR to use PM10 as a surrogate for PM2.5, we ask that you explicitly request of ENSR that it apply AERMOD using PM10 emissions, including the condensable component, to determine PM2.5 impacts. These impacts should then be assessed against the PM2.5 standards within 9 VAC Chapter 30, for purposes of PM2.5 compliance demonstration, and similarly, against the PM10 standards for purposes of PM10 compliance demonstration. At two of three state air regulatory agencies we contacted where PM2.5 non-attainment areas are widespread, this assumption, that all PM10 is actually PM2.5, is required of air permit applicants within their PM2.5 compliance demonstrations (South Coast Air Quality Management District, New Jersey Department of Environmental Protection). The third air regulatory agency contacted (Pennsylvania Department of Environmental Protection) stated that US EPA has made verbal notification that this assumption will be the basis for its future approved singlesource PM2.5 compliance demonstration procedure.

## Flagpole Receptors

While your response requests that ENSR place flagpole receptors at all "nearby raised structures", the exact meaning of the "nearby" in terms of distance is not entirely clear. The City requests this clarification and asks that you state exactly the raised structures on which to place flagpole receptors. The City has identified some of these in the table below and request that any list that is finally accepted is inclusive of the buildings listed in the table. For the case of Marina Towers, where very significant variations in concentrations may occur among individual residences due to this tower's very short distance from the modeled stacks, please also request that receptors be placed at each individual unit's exterior patio, on each of the tower's wings.

Raised Residential Structure	Street Adress	No. of Levels
Alexandria House	400 Madison	22
Carylse Towers	2121 Jamison	20
Carysdale East	22 W. Taylor Run Parkway	18
Hunting Point	1202 South Washington	8
Marina Towers	501 Slaters Lane	14 (283 units)
Meridian Building	1200 First Street	16
Port Royal Condominium	801 N. Pitt	17
Portals of Alexandria	601 Four Mile	14
Portner House Condominiums	621 N. St. Asaph	3
Potomac Club Apartment	1201 Braddock Place	3
The Calvert Apartments	3110 Mount Vernon	15
Torpedo Factory Condominiums	102 N. Union	6
Arbello Apartments	833 Bashford	3
Gunston Hall	915 S. Washington	3
Harbor Terrace Condominiums	501 S. Bashford	3
Mason Hall Apartments	1420 West Abingdon Drive	4
Old Town Crescent	828 Slatters Lane	4
Potomac Shores Condominiums	402 Bashford Lane	3
Potowmack Crossing	1600 West Abingdon	3
Trans Potomac Building	1199 N. Fairfax	10

### Toxic Pollutants Compliance Analysis

The City would like to iterate its request that the scope of pollutants that are analyzed for their compliance with Virginia's air quality regulations include the speciated compounds of dioxins and furans, poly-nuclear aromatic hydrocarbons, organic compounds, acid gases, and trace metals as these are listed in Tables 1.1-12, 1.1-13,

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1.1-14, 1.1-15 and 1.1-18, respectively within US EPA's AP-42 Compilation of Air Pollutant Factors for bituminous coal combustion. As previously agreed by VADEQ, and reiterated at the Public Information meeting on November 1, 2004, and at Mirant Community Monitoring Group meeting in December 2004, VADEQ's staff will perform this analysis. The City requests that this modeling analysis be performed concurrently with Mirant/ENSR's analysis.

## Worst Case emissions and Stack Parameters for Model Input

Your letter to ENSR requires Mirant to coordinate with VADEQ's Northern Regional office for worst case emissions data for model input. The City requests that this data be shared with the City, along with its basis that were used to arrive at it, before finalizing its use for modeling.

Again, we thank you very much for your cooperation and participation in this important analysis.

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